<u>IN THE SPECIFICATION</u>

Please replace the paragraph starting at line 6 on page 14 with the following marked up paragraph:

In order to create a scenario resembling the finite transforms encountered in brain processing, a set of discrete transforms need to be woven together into a sheet. This is done by using the formula for the half-sphere (Equation ~~??~~2) and acknowledging the finiteness of each geodesic set.

Please replace the paragraph starting at line 20 on page 17 with the following marked up paragraph:

This representation is correct ~~is correct~~ in the following way. A set of geodesics through points is assumed at the start. The values on these geodesics are given by the Radon transform in the usual sense. If sets of these structures, characterized by fixed angle ϑ, are added, a different average value formula is obtained, but the backprojection is of the same general form. Consequently, the result of the transformation may be inverted in a single step

Please replace the paragraph starting at line 10 on page 19 with the following marked up paragraph:

Figure 5 is an illustration of one embodiment of building dimension. <u>Moving from a single point 501 to</u> ~~T~~two points 501, 502 form<u>s</u> a line 511. Two lines 511, 512 form a plane 521. Two planes 521, 522 form a volume 531.

Please replace the paragraph starting at line 13 on page 21 with the following marked up paragraph:

The Radon transform is ~~duel~~ <u>dual</u> to the network because the neural network performs the Radon transform and inverts the Radon transform.

Please replace the paragraph starting at line 18 on page 23 with the following marked up paragraph:

The Radon transform is ~~duel~~ dual to the network 840 because the neural network 840 performs the Radon transform and inverts the Radon transform.